

d1
cont.

layer 4. This layer is surrounded by an outer semiconducting layer 5. The cable used as a winding in the preferred embodiment has no metal shield and no external sheath. To avoid induced currents and losses associated therewith in the outer semiconductor, this may be cut off into a number of parts, preferably in the coil end, that is, somewhere in the transitions from the stack of sheets to the end windings. Each cut-off part is then separately connected to ground, whereby the outer semiconductor will be maintained at, or near, ground potential in the whole cable length. This means that, around the solid insulated winding at the coil ends, the contactable surfaces, and the surfaces which are dirty after some time of use, only have negligible potentials to ground, and they also cause negligible electric fields.

IN THE CLAIMS:

d2

16. (Thrice Amended) The plant for generating high voltage power according to claim 15, wherein the first layer at substantially the same potential as the conductor.

d3

39. (Twice Amended) A plant for generating high voltage power including a rotating high voltage electric machine and a converter, the machine comprising a stator; a rotor and a winding, wherein said winding comprises a cable including at least one current-carrying conductor and an electric field confining insulating cover surrounding the conductor, said cable forming at least one uninterrupted turn in the corresponding winding of said machine, said current carrying conductor including a plurality of insulated strands and at least one uninsulated strand in contact with the cover.

d4

46. (Twice Amended) The plant according to claim 41, wherein the layers of the cover form a monolithic structure having the same temperature coefficient of expansion.